Appendix G

Brian Walsh's Presentation on Pipeline Incident Cost

Pipeline Incident Cost Data

South Dakota Underground Pipeline Task Force

September 22, 2008

Introduction

- > The purpose of this presentation is to review available incident costs for hazardous materials (includes natural gas) pipelines in the United States.
- > To do this the PHMSA incident database was used to review pipeline incident cost data for South Dakota and surrounding states and the U.S. as a whole.

PHMSA Accident Database

- > Pipeline incidents included in the database are those meeting the following criteria:
 - Those with gross loss greater than 50 barrels or.
 - Those with a fatality or injury requiring in-patient hospitalization or,
 - . Those with fire or explosions or,
 - · Those with Highly volatile liquid releases with gross loss of more than 5 barrels or,
 - · Those involving costs greater than or equal to \$50,000
- > Cost include all public and private cost associated with the incident (includes cleanup and response costs)

South Dakota and Surrounding States

- Data reviewed for these states includes all pipeline incidents between January 1, 1998 and 2008 YTD
- States reviewed include: South Dakota, North Dakota, Minnesota, Iowa, Nebraska, Montana and Wyoming

South Dakota

> Number of Incidents =

> Maximum Incident Cost = \$476.430 > Minimum Incident Cost = \$36,363

> Average Cost Per Incident = \$200.657

> Median Cost Per Incident = \$150,000

North Dakota

> Number of Incidents =

> Maximum Incident Cost = \$1,341,652

> Minimum Incident Cost = \$0

> Average Cost Per Incident = \$372,772

> Median Cost Per Incident = \$276,125

Minnesota

> Number of Incidents =

> Maximum Incident Cost = \$6,302,405

> Minimum Incident Cost =

> Average Cost Per Incident = \$592,620 > Median Cost Per Incident = \$170.996 Iowa

Number of Incidents =

> Maximum Incident Cost = \$2,291,773

> Minimum Incident Cost =

> Average Cost Per Incident = \$249,941

Median Cost Per Incident = \$104.757

Nebraska

> Number of Incidents = 23

> Maximum Incident Cost = \$765,470 > Minimum Incident Cost = \$2,494 > Average Cost Per Incident = \$227,893

> Median Cost Per Incident = \$146,416

Montana

> Number of Incidents = 15

> Maximum Incident Cost = \$879,525

> Minimum Incident Cost =

> Average Cost Per Incident = \$238,079

> Median Cost Per Incident = \$131,223

Wyoming

> Number of Incidents =

> Maximum Incident Cost = \$1,282,203

> Minimum Incident Cost = \$0

> Average Cost Per Incident = \$147,503

> Median Cost Per Incident = \$97,769

U.S. Pipeline Incidents

> Data reviewed for the U.S. includes all pipeline accidents between January 1, 1988 and 2008 YTD

• Number of Incidents = 5,921 • Average Cost per Incident =



